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(54) BROADCAST PROGRAM VIDEO RECORDING RESERVING SERVICE SYSTEM

(57)Abstract:
PROBLEM TO BE SOLVED: To provide a broadcast program video recording reserving service system that can provide a detection service for recording reservation considered to be clearly a wrong operation, a recording reservation service for a television program, coping with revision/extension of a program production time and a program information providing service.
SOLUTION: In the broadcast program video recording reservation service system of this invention, when the reservation of program recording is performed, utilizing program information and user information of an information server on a network eliminates a clear reservation operation mistake and can make program recording reservation control via a terminal, such as a mobile phone even from a place where the EPG or the like cannot be viewed. Furthermore, using this system can attain program information providing service and a pay service in a flexible form utilizing a view history of a user.

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CLAIMS

[Claim(s)]

[Claim 1] A program information acquisition means to be an accepting station for receiving the program information on the program and this program in which an external network and two-way communication are possible, and making timed recording of this program, and to acquire the program information on a program, The program whose timed recording should be made from the program information acquired with said program information acquisition means is chosen. By two-way communication A program selection means to check program selection based on this confirmed information in case the confirmed information for transmitting the program information on a program that selection was performed, and checking whether it is correct in the program corresponding to the this transmitted program information whose timed recording should be made is received, The program information on a program that the check of program selection with said program selection means was performed by two-way communication is transmitted. The accepting station characterized by having an image transcription playback means to perform timed recording of the program whose timed recording should be made based on this execution information, and playback when receiving the execution information for performing the image transcription of the program based on the transmitted this program information whose timed recording should be made.

[Claim 2] Said image transcription playback means is an accepting station according to claim 1 characterized by controlling timed recording by the timer based on said execution information including the channel information on a program that the timed recording of said execution information should be made,

a timed recording start signal, and a timed recording terminate signal.

[Claim 3] Said program information acquisition means is an accepting station according to claim 1 characterized by acquiring the program information on a program by broadcast or communication link.

[Claim 4] The accepting station according to claim 1 characterized by having a display means to display a screen and the program to reproduce for said program selection means to perform the check of program selection or program selection.

[Claim 5] The server characterized by having an execution information generation means to be the server in which the accepting station and two-way communication for receiving the program information on a program and this program, and making timed recording of this program are possible, and to generate the execution information for performing the image transcription of the program whose timed recording should be this made in case the program information on the program whose timed recording should be made is received.

[Claim 6] He is the server in which the accepting station and two-way communication for receiving the program information on a program and this program, and making timed recording of this program are possible. By two-way communication By confirmed information generation means to generate the confirmed information for checking whether it is correct in the program corresponding to the this received program information whose timed recording should be made in case the program information on the program whose timed recording should be made is received, and two-way communication The server characterized by having an execution information generation means to generate the execution information for performing the image transcription of the this checked program whose timed recording should be made in case the program information on the program which transmitted said confirmed information and was checked based on the confirmed information which this transmitted, and whose timed recording should be made is received.

[Claim 7] He is the server according to claim 6 which has the storage means

which memorized the program information on the program acquired by two-way communication, the attribute information which shows a terminal condition, and the viewing-and-listening hysteresis information which shows viewing-and-listening hysteresis, and is characterized by to judge a check correct in the program in said confirmed information generation means whose timed recording should be made based on each information on said storage means.

[Claim 8] The server according to claim 5 or 6 which has the storage means which memorized the viewing-and-listening hysteresis information which shows the viewing-and-listening hysteresis acquired by two-way communication, and an analysis means to analyze a viewing-and-listening inclination using said viewing-and-listening hysteresis information, and is characterized by transmitting the information about programs other than the program based on said analysis whose timed recording should be made by two-way communication [claim 9] A program information acquisition means to be an operating station for receiving the program information on a program in which an external network and two-way communication are possible, and making timed recording of this program, and to acquire the program information on a program, Program selection whose timed recording should be made from the program information acquired with said program information acquisition means is performed. By two-way communication The operating station characterized by having a program selection means to check program selection based on this confirmed information when receiving the confirmed information for transmitting the program information on a program that selection was performed, and checking whether it is correct in said program corresponding to the this transmitted program information whose timed recording should be made.

[Claim 10] It is the timed recording system which consists of the accepting stations and servers for receiving mutually the program information on the program and this program in which two-way communication is possible, and making timed recording of this program. Program selection whose timed recording should be made from the program information acquired with a program

information acquisition means to acquire the program information on a program, and said program information acquisition means is performed. By two-way communication A program selection means to check program selection based on this confirmed information in case the confirmed information for transmitting the program information on a program that selection was performed, and checking whether it is correct in the program corresponding to the this transmitted program information whose timed recording should be made is received, The program information on a program that the check of program selection with said program selection means was performed by two-way communication is transmitted. In case the execution information for performing the image transcription of the program based on the transmitted this program information whose timed recording should be made is received, by the accepting station equipped with an image transcription playback means to perform timed recording of the program whose timed recording should be made based on this execution information, and playback, and two-way communication By confirmed information generation means to generate the confirmed information for checking whether it is correct in the program corresponding to the this received program information whose timed recording should be made in case the program information on the program whose timed recording should be made is received, and two-way communication In case the program information on the program which transmitted said confirmed information and was checked based on the confirmed information which this transmitted and whose timed recording should be made is received The timed recording system characterized by consisting of servers having an execution information generation means to generate the execution information for performing the image transcription of the checked this program whose timed recording should be made.

[Claim 11] It is the timed recording system which consists of the accepting stations and servers for receiving the operating station and this program for receiving mutually the program information on a program in which two-way communication is possible, and making timed recording of this program, and

making timed recording of this program. Program selection whose timed recording should be made from the program information acquired with a program information acquisition means to acquire the program information on a program, and said program information acquisition means is performed. By two-way communication In case the confirmed information for transmitting the program information on a program that selection was performed, and checking whether it is correct in the program corresponding to the this transmitted program information whose timed recording should be made is received By two-way communication with an operating station equipped with a program selection means to check program selection based on this confirmed information In case the execution information for performing the image transcription of the program based on the program information on a program that the check of program selection was performed by said program selection means whose timed recording should be made is received By the accepting station equipped with an image transcription playback means to perform timed recording of the program whose timed recording should be made based on this execution information, and playback, and two-way communication By confirmed information generation means to generate the confirmed information for checking whether it is correct in said program corresponding to the this received program information whose timed recording should be made in case the program information on the program whose timed recording should be made is received, and two-way communication In case the program information on the program which transmitted said confirmed information and was checked based on the confirmed information which this transmitted and whose timed recording should be made is received The timed recording system characterized by consisting of servers having an execution information generation means to generate the execution information for performing the image transcription of the checked this program whose timed recording should be made.

[Claim 12] By being the timed recording approach for receiving the program information on a program and this program, and serving timed recording of this

program, and receiving the information about a specific user Reception / initiation step which starts service to a specific user, The timed recording approach characterized by having the 1st receiving step which receives the program information on the program whose timed recording should be made from said specific user, and the execution information generation transmitting step which generates the execution information for performing said image transcription of a program whose timed recording should be made, and is transmitted to said specific user.

[Claim 13] The timed recording approach according to claim 12 characterized by having the confirmed information generation transmitting step which generates the confirmed information for checking whether it is correct in said program whose timed recording should be made, and is transmitted to said specific user, and the 2nd receiving step which receives the program information on the program which was checked by said specific user based on said confirmed information, and whose timed recording should be made.

[Claim 14] The information about said user is the address, a name, age, an occupation, the telephone number, a mail address, a card number, the account number, and the timed recording approach according to claim 12 characterized by the thing of acknowledgement of service initiation included for either at least.

[Claim 15] The timed recording approach according to claim 12 characterized by having the accounting step which performs accounting according to the total, the total image transcription time amount, or the total playback time amount of said program whose timed recording should be made.

[Claim 16] The timed recording approach according to claim 12 characterized by having the accounting step which performs accounting according to this program having been recorded on videotape when said program whose timed recording should be made is a charge.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the service system which performs offer of the image transcription and reservation of a television broadcasting program, and program information.

[0002]

[Description of the Prior Art] In television broadcasting, especially CS digital broadcasting, program information is displayed on TV receiver as a program guide (it is described as EPG). A user chooses the program which wants to see, view and listen to this displayed EPG, and does image transcription reservation at viewing and listening or a recording device.

[0003]

[Problem(s) to be Solved by the Invention] As mentioned above, when seeing EPG and performing image transcription reservation, the time amount of a record medium which can be recorded on videotape exceeds, even when timed recording is made or program reservation which plans to reserve accidentally the program which the program to record on videotape originally on EPG adjoined accidentally [**** / making timed recording / button grabbing] and which is not is carried out, if there is no problem in a procedure, it is regarded as the usual image transcription reservation, and image transcription reservation will perform.

[0004] Moreover, EPG cannot perform image transcription reservation in the place which sees with TV receiver and does not have TV receiver.

[0005] Although it is also possible to see program information with books, in a place without TV receiver, there is no approach of inputting information required for image transcription reservation into TV receiver or a recording device.

[0006] Although it is possible to digitize and deliver information required for reservation if the approach of carrying out image transcription reservation of the program in several digits (for example, system called a G code) as the simple

image transcription reservation approach is adopted, the case where the indicating equipment for the check of the input of this figure is hard to see, and completely different image transcription reservation of the program of time amount and a channel only by making a mistake in putting in the single figure of this figure may fulfill.

[0007] That is, EPG is displayed with TV receiver and there are the following problems in the conventional method of setting up record of a program, after seeing EPG.

[0008] 1) If the reservation actuation which the user performed accidentally does not have a problem in a procedure, either, image transcription reservation will be fulfilled.

[0009] 2) When there is no TV receiver, image transcription reservation cannot be made.

[0010] This invention cancels the two above-mentioned technical problems.

[0011]

[Means for Solving the Problem] As mentioned above, it is made to be the following in order not to perform image transcription actuation, when actuation which the user mistook is performed.

[0012] It is the timed recording system which consists of the accepting stations and servers for receiving mutually the program information on the program and this program in which two-way communication is possible, and making timed recording of this program. Program selection whose timed recording should be made from the program information acquired with a program information acquisition means to acquire the program information on a program, and said program information acquisition means is performed. By two-way communication A program selection means to check program selection based on this confirmed information in case the confirmed information for transmitting the program information on a program that selection was performed, and checking whether it is correct in the program corresponding to the this transmitted program information whose timed recording should be made is received, The program

information on a program that the check of program selection with said program selection means was performed by two-way communication is transmitted. In case the execution information for performing the image transcription of the program based on the transmitted this program information whose timed recording should be made is received, by the accepting station equipped with an image transcription playback means to perform timed recording of the program whose timed recording should be made based on this execution information, and playback, and two-way communication By confirmed information generation means to generate the confirmed information for checking whether it is correct in the program corresponding to the this received program information whose timed recording should be made in case the program information on the program whose timed recording should be made is received, and two-way communication In case the program information on the program which transmitted said confirmed information and was checked based on the confirmed information which this transmitted and whose timed recording should be made is received It considers as the timed recording system which consists of servers having an execution information generation means to generate the execution information for performing the image transcription of the checked this program whose timed recording should be made.

[0013] A technical problem is solvable with the following system behavior in the above system configuration.

[0014] When a user performs image transcription reservation, based on the program information from the information server on broadcast or a network, a user performs image transcription reservation on EPG. An accepting station sends the image transcription reservation program information, and the custom information and terminal status information (the total image transcription hour entry of a record medium, the hour entry of a record medium which can be recorded on videotape, operating state information on an accepting station, user actuation hysteresis information, etc.) which are attribute information to an information server. In addition to each received information, an information server

refers to the user viewing-and-listening hysteresis information on the past accumulated on the information server. If there is no fault in adjustment with the judgment with custom information, the past viewing-and-listening hysteresis, and the time amount of an accepting station that can be recorded on videotape, the execution information of an image transcription reservation program will be sent to an accepting station. When the image transcription reservation applicable to custom information (for example, items, such as a parental lock and a record prohibition setup of a pay program) is set up at this time, When the image transcription reservation with which taste differs from the user viewing-and-listening hysteresis information on past is set up, Or when there are faults in case image transcription time amount exceeds the time amount which can be recorded on videotape The image transcription reservation confirmed information which specified fault from the information server to the user of an accepting station using the two-way communication function is delivered, and the purport of fault is shown to the EPG screen or television screen of an accepting station as a notice of an image transcription reservation check. On the other hand, a user performs an image transcription reservation check, and if a mistake occurs, he will notify the information on cancellation, correction, and addition of image transcription reservation to an information server.

[0015] When the information on cancellation, correction, and addition of image transcription reservation is received from an accepting station, an information server cancels, corrects and adds the applicable part of image transcription reservation, and is made not to publish an instruction of the image transcription reservation which has fault to an accepting station.

[0016] Thus, when image transcription reservation which the user mistook is performed, it is not made not to perform image transcription reservation.

[0017] Moreover, it is made to be the following in order to be able to make image transcription reservation even from a place without TV receiver as mentioned above.

[0018] It is the timed recording system which consists of the accepting stations

and servers for receiving the operating station and this program for receiving mutually the program information on a program in which two-way communication is possible, and making timed recording of this program, and making timed recording of this program. Program selection whose timed recording should be made from the program information acquired with a program information acquisition means to acquire the program information on a program, and said program information acquisition means is performed. By two-way communication In case the confirmed information for transmitting the program information on a program that selection was performed, and checking whether it is correct in the program corresponding to the this transmitted program information whose timed recording should be made is received By two-way communication with an operating station equipped with a program selection means to check program selection based on this confirmed information In case the execution information for performing the image transcription of the program based on the program information on a program that the check of program selection was performed by said program selection means whose timed recording should be made is received By the accepting station equipped with an image transcription playback means to perform timed recording of the program whose timed recording should be made based on this execution information, and playback, and two-way communication By confirmed information generation means to generate the confirmed information for checking whether it is correct in said program corresponding to the this received program information whose timed recording should be made in case the program information on the program whose timed recording should be made is received, and two-way communication In case the program information on the program which transmitted said confirmed information and was checked based on the confirmed information which this transmitted and whose timed recording should be made is received It considers as the timed recording system which consists of servers having an execution information generation means to generate the execution information for performing the image transcription of the checked this program whose timed

recording should be made.

[0019] A technical problem is solvable with the following system behavior in the above system configuration.

[0020] It judges whether there is any fault at an information server about the image transcription reservation program information which the user reserved. Using each received information, it refers to the check of the time amount and the channel of an image transcription reservation program, custom information, the time amount that can be recorded on videotape, past User Information, etc., and, as for an information server, the image transcription reservation confirmed information which added the information which shows the judgment result is beforehand sent to the information terminal (for example, cellular phone with a built-in electronic mail function) which the user registered into the information server. A user displays the sent image transcription reservation confirmed information on the screen of an information terminal, and checks it. At this time, if there are cancellation, correction, and an addition, that information will be inputted with the keyboard on an information terminal etc., and data (electronic mail) will be created. The information on the image transcription reservation canceled, corrected and added is sent to an information server as reply data from an information terminal. In an information server, if it refers to the various information on an information server and there is no fault in the information on a new image transcription reservation program again based on this answered data, the execution information of an image transcription reservation program will be sent to an accepting station based on the information on this image transcription reservation. Moreover, temporarily, to image transcription reservation confirmed information, even before fixed time amount of fixed time amount or the first reservation time amount, if there is no information on the correction and addition from an information terminal, it will judge that he has no modification, and based on the program information on the image transcription reservation check delivered from the information server, the execution information of an image transcription reservation program is sent. An accepting station carries out timed

recording control of the image transcription playback means by the reservation actuation control means in response to execution information.

[0021]

[Embodiment of the Invention] Drawing 1 is the outline block diagram showing 1 operation gestalt of the service system of this invention.

[0022] In drawing 1 , 1 is a broadcasting station and the network network with which in the transmitting antenna of a broadcasting station, and 3 an accepting station and 5 called it the indicating equipment, and the receiving antenna of an accepting station and 4 called [2] 6 the Internet or the telephone line, and 7 is an information server.

[0023] At a broadcasting station 1, program information is added to an image and a sound signal, and the encoded information is transmitted from the transmitting antenna 2 of a broadcasting station. In an accepting station 4, while the receiving antenna 3 of an accepting station receives the broadcast wave from a broadcasting station, the information server 7 and two-way communication are performed through the network network 6.

[0024] The internal configuration of the accepting station of 4 is shown in drawing 2 .

[0025] In drawing 2 , a program information extraction means by which 8 extracts a tuner and 9 extracts program information (EPG) from the input signal of a tuner 8, and 10 Or the program information outputted to the output-control means 13 is checked by looking with a display 5 from both program information. the program information from the program information extraction means 9, or the program information from the program information acquisition means 11 -- The program information selection means for choosing an image transcription reservation program by remote control actuation of a user, A program information acquisition means by which 11 acquires program information and image transcription reservation confirmed information from the information server 7 through a communication line with the two-way communication means 12, A two-way communication means by which 12 performs two-way communication using a

communication line, and 13 An output-control means, An image transcription / playback means by which 14 performs image transcription and playback of a program, and 15 receive the execution information of an image transcription reservation program from the information server 7. By the execution information of this image transcription reservation program The reservation actuation control means which carries out timed recording control of the image transcription / playback means 14, an actuation taking-in means by which 16 incorporates user actuation information with remote control, Beforehand 17 The propriety of viewing and listening of a parental lock and charged broadcast, image transcription mode setup (a criterion, long duration, etc.), The custom information storage means which carries out memory of the custom information on user propers, such as a priority of an image transcription program when reservation laps by time amount extension, and necessity of recommended program information offer, The total image transcription hour entry of the record medium for an image transcription for which 18 is used with image transcription / playback means 14, It is a terminal condition storage means to acquire terminal status information including the hour entry which can be recorded on videotape, the operating state information on an accepting station, the contents of user actuation (program information recorded on videotape, playback information on the program recorded on videotape), etc. from the actuation taking-in means 16 or image transcription / playback means 14, and to memorize it.

[0026] The internal configuration of the information server of 7 is shown in drawing 3 .

[0027] It is the program information database with which 19 memorizes program information in drawing 3 . 20 is reservation information judging / reservation confirmed information generation means which creates image transcription reservation confirmed information which added the information on a judgment result to the judgment of the image transcription reservation program information from an accepting station 4, and image transcription reservation program information using the information on the program information database 19 and

the information management means 60 classified by user. A two-way communication means by which 21 performs two-way communication with an accepting station 4, and 22 are the execution information generation means of the image transcription reservation program which creates the execution information of the image transcription reservation program used as image transcription program information for the reservation actuation control means 15 of an accepting station 4 to carry out timed recording control of the image transcription / playback means 14. 60 is the information management means classified by user by which the storage management was carried out according to the user who consists of a storage means 26 to memorize storage means 23, 24, and 25 to memorize the image transcription reservation program information from an accepting station 4, custom information, and terminal status information, respectively, and viewing-and-listening hysteresis information. Viewing-and-listening hysteresis information The image transcription reservation program information which the user performed in the past (information which accumulated the image transcription reservation program memorized in the past in the storage means 23), It consists of terminal status information of the past including the contents of actuation of the program information (from terminal status information to acquisition) to which the user fulfilled image transcription reservation in the past, the program information (from terminal status information to acquisition) reproduced of the programs which fulfilled image transcription reservation, and others which the user performed in the past etc. Moreover, the information management means 60 classified by user analyzes the viewing-and-listening hysteresis information on the viewing-and-listening hysteresis information storage means 26, and has the function to grasp a user's favorite genre.

[0028] Hereafter, it explains to a detail using drawing 1 , drawing 2 , and drawing 3 .

[0029] In the accepting station shown in drawing 2 , a tuner 8 receives the signal of television broadcasting (terrestrial TV broadcast, CS broadcasting, and BS broadcast are included in television broadcasting) first. The received signal is

inputted into each processing block of the output-control means 13, image transcription / playback means 14, and the program information extraction means 9. Here, the output of the output-control means 13 becomes any of the output signal acquired from the tuner 8, the EPG signal of the program information selection means 10, or the output signal of image transcription / playback means 14 to be. With the program information extraction means 9, program information is outputted for program information to an extract and the program information selection means 10. With the program information selection means 10, while outputting the program information acquired from the program information extraction means 9 to the output-control means 13, the contents of remote control actuation (the contents of image transcription reservation) which the user performed to the program information outputted to the display 5 are taken in through the actuation taking-in means 16. The incorporated image transcription reservation information is transmitted to the information server 7 connected to the network 6 through the communication line using the two-way communication means 12. At this time, the custom information on the custom information storage means 17 and the terminal status information of the terminal condition storage means 18 are also transmitted to the information server 7 together.

[0030] The image transcription reservation program information transmitted to the information server 7 by the above, custom information, and terminal status information are memorized by the image transcription reservation program information storage means 23 of the information management means 60 classified by user, the custom information storage means 24, and the terminal status information storage means 25 through the two-way communication means 21 of drawing 3 , respectively. As for each of such information, the following data processing is performed by reservation information judging / reservation confirmed information generation means 20.

[0031] ** The comparison with the contents of image transcription reservation, and the contents of a program of a program information database (time, a broadcasting station, title, etc.), a judgment.

[0032] ** The judgment of custom information and the adjustment of the contents of a program of a program information database (existence of the charge and no charge, and a parental lock etc.).
[0033] ** The comparison of the contents of image transcription reservation based on the viewing-and-listening hysteresis (viewing-and-listening hysteresis information according to category of a program etc.) of a user's past, a judgment.
[0034] ** Count of program image transcription time amount (each program image transcription reservation time amount, the total image transcription time amount of a terminal, time amount of a terminal that can be recorded on videotape), a judgment.
[0035] If there is no fault in the above-mentioned result of an operation, the image transcription reservation program information will be passed to the execution information generation means 22 of an image transcription reservation program with reservation information judging / reservation confirmed information generation means 20. With the execution information generation means 22 of an image transcription reservation program, it considers as the execution information of the image transcription reservation program used as the image transcription program information for carrying out timed recording control of the image transcription reservation program information, and the execution information of an image transcription reservation program is transmitted to the reservation actuation control means 15 of the accepting station 4 by which network connection is carried out using the two-way communication means 21. By the execution information of the received image transcription reservation program, the reservation actuation control means 15 carries out timed recording control of the image transcription / playback means 14.
[0036] On the other hand, in reservation information judging / reservation confirmed information generation means 20, the following fault **** case or when required, the data of the image transcription reservation confirmed information which added the information for displaying the contents of fault or need are generated, and data transfer of image transcription reservation confirmed

information is performed to the accepting station 4 connected to the network 6 at the result of an operation using the two-way communication means 21.

[0037] ** When a time setup of image transcription reservation has conflict.

[0038] ** When image transcription reservation of the pay program is carried out that the image transcription (viewing and listening) of a pay program is forbidden.

[0039] ** When image transcription reservation of the program in which taste differs from a usual image transcription (viewing and listening) program clearly is carried out.

[0040] ** When the time amount of a terminal which can be recorded on videotape is exceeded and image transcription reservation is made.

[0041] The data of the image transcription reservation confirmed information transmitted from this information server 7 are inputted into the program information acquisition means 11 through the two-way communication means 12 of drawing 2 . The print-out from the program information acquisition means 11 is outputted to the output-control means 13 by the program information selection means 10 using an EPG display function. In this image transcription reservation check, the information outputted from the program information selection means 10 is outputted from the output-control means 13, and is displayed as confirmed information of an image transcription reservation program with a display 5.

[0042] A user checks the contents of image transcription reservation confirmed information with a display 5.

[0043] When there are cancellation, correction, and an addition, a user inputs modification and fix information text required for said image transcription reservation confirmed information with the actuation taking-in means 16 by the remote-control input, and transmits said information to the information-management means 60 classified by user of the information server 7 on a network 6 through the program information selection means 10 and the two-way-communication means 12 like the case where image transcription reservation is performed, as new image transcription reservation program information.

Reservation information judging / reservation confirmed information generation

means 20 is re-judged based on the contents of cancellation, correction, and the addition of this transmitted image transcription reservation. If there is no fault, with the execution information generation means 22 of an image transcription reservation program, the execution information of the image transcription reservation program used as the image transcription program information for carrying out timed recording control which deleted excessive additional information from new image transcription reservation program information will be created, and processing which mentioned above below will be performed similarly.

[0044] Moreover, when there are not cancellation, correction, and an addition by the user to the contents of the image transcription reservation confirmed information from the information server 7, a user may not perform the above alter operation. For this reason, with reservation information judging / reservation confirmed information generation means 20 of the information server 7, image transcription reservation confirmed information judges it as what (there is no modification) was recognized by the user by the fixed passage of time after transmission of image transcription reservation confirmed information. Thereby, the information server 7 performs similarly processing mentioned above based on the contents of this recognized image transcription reservation confirmed information.

[0045] In addition, although [the above-mentioned explanation] timed recording control of the image transcription / playback means 14 is carried out by the reservation actuation control means 15 of an accepting station 4 A timed recording control function is given to the execution information generation means 22 of the image transcription reservation program of the information server 7. Information required for timer control of the channel information on a reservation activation program, program title information, a timed recording initiation control signal, a timed recording terminate signal, etc. may be carried out to the reservation actuation control means 15, and you may make it make timed recording make for delivery and image transcription / playback means 14.

[0046] On the other hand, information, such as the contents of actuation of the transmitted program information between the above-mentioned information server 7 and an accepting station 4 or a user and operating state of an accepting station, is stored in the viewing-and-listening hysteresis information storage means of the information management means classified by user on the information server 7 as personal data. This individual humanity news is used for databases, such as data referred to in the case of judgment processing of the image transcription reservation program information according to user to whom it is carried out on and after next time, and data referred to in the case of recommendation program information offer based on each user's viewing-and-listening hysteresis.

[0047] Since the information on the use situation (an image transcription, playback and program information, a user's contents of actuation) of a user's accepting station is included in the further above-mentioned database, by using this information, the following accounting models can be combined freely, and the service which suited each user at needs and usage can be offered, and courtesy-rates management according to user can be realized.

[0048]

** To the total number of programs of an image transcription program The image transcription reservation of the accounting model ** pay program discounted to pay program image transcription use of the accounting model ** regularity added to image transcription reservation of the accounting model ** image transcription program proportional to the total number of playback time amount of the accounting model ** image transcription program proportional to the total number of image transcription time amount of the proportional accounting model ** image transcription program Each of the accounting model ** above which is added to having recorded on videotape the pay program which is added to having carried out, and which carried out accounting model ** image transcription reservation is multiplied by a certain ratio. When performing the above accounting which is the added accounting models, I need to have a predetermined application made

before service provision to a user. That is, the information about the user itself who is operating it must be inputted, and when a server's manager receives this information, it enables it to start the above-mentioned service in the predetermined screen of an accepting station or a personal digital assistant to the user who is operating it. Here, as information about the user who inputs, the address, a name, age, an occupation, the telephone number, a mail address, the card number of a credit card and the account number of a bank, and acknowledgement of the service initiation which reconfirms receiving this service for pay are mentioned.

[0049] It is clear that payment pays viewing-and-listening cost using the program information which carried out image transcription reservation, and can especially pay viewing-and-listening cost using ** and the program information whose timed recording was actually made since the program information whose timed recording was actually made at this invention in the case of the pay program can be known by terminal status information.

[0050] Moreover, although the above-mentioned explanation explained as acquiring the information on image transcription reservation from the information on EPG "It is the general image transcription reservation approach. A channel, image transcription start time, image transcription end time Or when the information on image transcription reservation is inputted using image transcription time amount", it also sets. It is possible by comparing the information about a program information database, a channel, and image transcription time amount by the information server 7 to process like the case where replaced image transcription reservation information as information on image transcription reservation of EPG, and it acquires from the information on EPG.

[0051] In addition, although the above-mentioned explanation explained by performing acquisition of EPG information using a program information extraction means 9 to acquire from a broadcast wave You may make it acquire the program information on the information server 7 using the program information acquisition

means 11, and may make it use the program information on both the program information extraction means 9 and the program information acquisition means 11 through the program information database 19 and the two-way communication means 12 of the information server 7 similarly.

[0052] The example of remote control is shown in drawing 4 , and the example of a display in the display 5 of the system of drawing 1 is shown in drawing 5 , drawing 6 , and drawing 7 .

[0053] In drawing 4 , in remote control and 52, a cursor key and 53 show a decision key and 58 shows [51] the EPG key, respectively. In a cursor key 52, the decision key 53 makes toggle actuation of selection and not choosing, and the EPG key 58 makes vertical and horizontal selection for the toggle actuation of an EPG display and the TV display.

[0054] It changes from the usual TV display condition to an EPG screen by pressing the EPG key 58 of remote control 51.

[0055] Drawing 5 is the example of a display of EPG, an axis of ordinate shows a channel and the axis of abscissa shows time amount. Here, the cursor (rectangle field of a thick wire) of remote control is pointing to "movie "robot"." Here, cursor can move by the cursor key 52 of drawing 4 , the program on EPG can be chosen, and image transcription reservation can be registered by pressing the decision key 53.

[0056] Drawing 6 is the example of a display of the contents of image transcription reservation, and the notation of the left end part of a table shows "the case where there is a program of which #:recommendation is done", respectively, when ["when fault is in *:data"], "the case of O:normal reservation", and. This drawing shows that the cursor of current and remote control is in the part of "movie "robot"", and fault is in the contents of image transcription reservation shown in gray. the case where gray "21:00 - 21:50" part specifically has fault in image transcription initiation end time -- gray -- "-- the case where a movie "violence"" has fault between the parental lock information on custom information -- gray -- "-- it is the case where it is thought that a sport "baseball""

has fault (image transcription reservation by the operation mistake) from the past viewing-and-listening hysteresis.

[0057] Moreover, a "comic dialog special" is an example which shows that the notation of the left end part of a table is "#", and it is the program information recommended from the viewing-and-listening hysteresis of custom and the past.

[0058] The "amount" of the lower right part used of a table is shown [current, what par set use is due to be carried out, and] to the time amount (this example 400 minutes) which can be recorded on videotape. Here, it has become "102% of gray" and is the example which shows that it is reserved exceeding the time amount which can be recorded on videotape.

[0059] In the first example, to the example of a display of the image transcription reservation confirmed information of drawing 6 , a user corrects and the contents of correction are transmitted to the information server 7. The information server 7 creates the execution information of an image transcription reservation program based on the contents of the transmitted image transcription reservation, and an accepting station 4 performs image transcription control using this information.

[0060] After a user's correcting and transmitting the contents of correction to the information server 7 as an option to the example of a display of the image transcription reservation confirmed information of drawing 6 , new image transcription reservation confirmed information is again acquired from the information server 7, and it may be made to display new image transcription reservation confirmed information.

[0061] Drawing 7 shows presenting of the new image transcription reservation confirmed information at the time of correcting the fault of drawing 6 using a cursor key 52 and the decision key 53 with the remote control 51 of drawing 4 . The notation of the left end part of a table is the example which enabled it to check image transcription reservation by having become "in O:normal reservation."

[0062] The "amount" of the lower right part used of a table is "67%", and not being reserved more than the time amount which can be recorded on videotape

is shown.

[0063] Drawing 8 is the outline block diagram showing the second example of the service system of this invention.

[0064] In drawing 8 , 28 is the operating station (you may be a cellular phone) connected to the network 6, the initial entry to this operating station is beforehand registered into the custom information 24 in the information management means 60 classified by user of the information server 7, and the image transcription reservation check from the information server 7 is made to an operating station 28. 27 is the mail server connected to the network 6.

[0065] In drawing 8 and drawing 1 , the same number is given to the same function part, and explanation is omitted.

[0066] Moreover, the internal configuration of the accepting station of four in drawing 8 and the information server of 7 is constituted by aforementioned drawing 2 and drawing 3 , respectively.

[0067] Moreover, an operating station is equipped with the two-way communication means, program information acquisition means, and program information selection means which were explained with the accepting station.

[0068] Hereafter, it explains to a detail using drawing 2 , drawing 3 , and drawing 8 .

[0069] The internal configuration of an accepting station 4 is as drawing 2 in drawing 8 , and since actuation is the same as that of the first example, it omits explanation.

[0070] The internal configuration of the information server 7 is as drawing 3 in drawing 8 , and since actuation is the same as that of the first example, it omits explanation.

[0071] In the second example, in reservation information judging / reservation confirmed information generation means 20, when fault is in the judgment result, or when there is need, the electronic mail for performing the contents check of image transcription reservation to the mail server 27 connected to the network 6 using the two-way communication means 21 is delivered. Moreover, even when

there is no fault in a judgment result, you may make it deliver image transcription reservation confirmed information as alphabetic data of an electronic mail like the above.

[0072] The example of a display of the image transcription reservation confirmed information on the operating station 28 at this time is shown in drawing 9 and drawing 10 .

[0073] In drawing 9 and drawing 10 , in 54, a display panel and 56 show a cursor key and, as for an operating station and 55, 57 shows a decision key.

[0074] the example as which the information which shows the display panel 55 of drawing 9 whether fault is in a reservation program sequentially from left-hand side, the title of a program, the start time of a program, and the end time of a program are displayed -- being shown -- **** -- "the 1ch movie A", a "2ch drama", and the "1ch movie B" -- any -- normal -- a program -- the reserved example is shown.

[0075] Similarly, normally, "the 1ch movie A" shows the example when "1ch movie B" offers the program information considered to be liking from the past viewing-and-listening hysteresis although image transcription reservation is not performed by the user to the display panel 55 of drawing 10 , when it is thought that "2ch drama" has fault in image transcription reservation information when finishing [image transcription reservation].

[0076] After checking the above-mentioned image transcription reservation confirmed information, if a user has cancellation, correction, and an addition, he will input the contents, and he transmits the image transcription reservation information that are answering a letter as an electronic mail, and the data was changed to the information server 7 through a mail server 27. After the information server 7 performs fault of program information for a check, the judgment of the contents of a program, the comparison with custom information, etc. like the above based on the image transcription reservation information on the received electronic mail, the execution information of an image transcription reservation program is created, and an accepting station 4 performs image

transcription control using this information. When fault is in this transmitted information further, moreover you may make it make the contents of image transcription reservation check to a user again, furthermore, in the above-mentioned explanation Although considered as the system configuration which acquires image transcription reservation confirmed information as data of an electronic mail, using a mail server as an approach of delivering to an operating station It is good also as a system configuration which installs a HTTP server instead of a mail server, expresses the specific URL address according to each user as the perusal software called allocation and a browser, and transmits the information on cancellation, correction, and an addition to a server. Moreover, the device which attests with the ability of other users' information not to be accessed may be given by setting up a password according to a user in this case, or distinguishing the telephone number of a sending agency.

[0077] Furthermore, it is good also as the system configuration which can carry out direct delivery of the data from an information server without a mail server or a HTTP server at an operating station, and a configuration which incorporates the function of the mail server of the above-mentioned example, or a HTTP server to the information server itself.

[0078] Drawing 11 is an example of the outline block diagram for building the program information database 19 of drawing 3 .

[0079] For a two-way communication means and 32, as for a tuner and 35, in drawing 11 , a program information acquisition means and 34 are [31 / a program information extraction means and 36] program information management databases.

[0080] It communicates using the two-way-communication means 31 from the broadcasting station connected in the network, and it is considering in the configuration example of the program information database of drawing 11 as the configuration which builds a program information database based on the program information acquired using the program information acquisition means 32, and the program information which received the broadcast wave with the antenna,

decoded with the tuner 34, and was acquired using the program information sampling means 35.

[0081] When a program information database is built by the configuration of drawing 11 , the program information acquired using the program information acquisition means 32 and the program information acquired using the program information sampling means 35 can also be treated as data which carried out mutually-independent.

[0082] As for the program information on the program information acquisition means 32, as an example, the program information on the program information sampling means 35 (between 15 to the 30th) can treat the independent information of (during the 14th from today) as information on a program information database from today to two weeks from two week or subsequent ones to one-month after.

[0083] Usually, the program information which will generally be acquired from a broadcast wave comparatively easily since it is acquirable if the information received from broadcast adds the program information extraction means 9 in drawing 2 and the program information selection means 10 to a television receiver etc. is the same as the program information acquired from the program information sampling means 35 of drawing 11 .

[0084] In this case, in a general user (EPG of only the information from broadcast), the user (EPG with the information from broadcast and the information from a network) of the example of this invention can see EPG from today to one-month after to the ability only of the information from today to two weeks to come to hand.

[0085] Furthermore, by the information server of the system of this invention, when accounting of a pay program etc. carried out image transcription reservation of the required program, since a user judged the program which carried out image transcription reservation by the date, when image transcription reservation was performed to a user before broadcast the 15th, it was able to be said that special discount to early image transcription reservation was processed.

Furthermore, the sample data which shows how much a user's interests there are to a broadcasting station can be offered beforehand.

[0086] Since the sample data for predicting a popular degree in advance can come to hand before considering subsequent programming by popular existence (it is usually proportional to the number of accounting of a pay program) after becoming possible to grasp whenever [of a user / popular] and actually performing program broadcast before program broadcast by this, programming which considered the popular degree from the earlier stage becomes possible.

[0087] Moreover, since it had become the configuration which acquires program information by the broadcast wave and the communication line from a broadcasting station like drawing 11 , after said image transcription reservation program is decided and the execution information of an image transcription reservation program is generated, even if the program information database 19 of the information server of drawing 3 has modification and time amount extension of a program, it can obtain the modification information from a broadcast wave or a broadcasting station. If a broadcasting station and an information server are especially connected by the dedicated line, program information and the modification information on a program can come to hand serially. The execution information of said image transcription reservation program is changed using this modification information, and image transcription control of the image transcription playback means is carried out for the changed execution information by delivery and the changed execution information at the reservation actuation control means of an accepting station. Thus, even if there are modification and time amount extension of a program, it can follow and record on videotape.

[0088] The priority of the image transcription program of whether although it is natural, priority is given to the image transcription reservation carried out or it performs previously when the time amount of a reservation program overlaps by the above, or to give priority to the reservation fulfilled later reserves the priority of image transcription reservation by judging according to custom information

(nothing [point priority, back priority, movie priority and serial drama priority / modification extension] etc.).

[0089] When nothing [modification extension] is set up by the user, you may make it take delivery and an user validation for program modification information to an accepting station or an information terminal from reservation information judging / reservation confirmed information generation means of an information server.

[0090] Furthermore, although explanation of the above-mentioned example has described as what has always connected acquisition of all data (execution control, custom information, etc. on actuation / image transcription reservation of image transcription reservation), two-way communication processing, and user actuation to a network Once memorize the information (status information of the information and the accepting station of actuation of a user etc.) which does not need especially real-time processing in the accepting station, and it is periodical. Or you may constitute so that it may collect into the time amount which the image transcription actuation top faults in front of the phase where fixed actuation information was accumulated, and fixed time amount which turns into program image transcription reservation time amount etc. do not produce and may deliver to an information server. The loss time amount for transmission and reception of the data generated by this using the network (for example, telephone) of the low speed which is not always connection is abolished, and a fall and communication link cost (telephone charges) of the actuation response between an information server and an accepting station can be reduced. Furthermore, by the above, the connect time per accepting station can become short, the load of an information server can be made light, and the fall of an actuation response can be improved.

[0091] In addition, it is clear to the above mentioned image transcription that a data signal is also included with a video video signal and a sound signal.

[0092]

[Effect of the Invention] As stated above, in order for the information server on the network concerning this invention to perform record reservation control of an

accepting station with record and a regenerative function, it becomes that it is possible in providing record / reservation service and program communications service of a television program corresponding to detection service of the record reservation considered to be based on a clear operation mistake, modification of the organization time amount of a program, and extension.

[0093] Moreover, correction of program record reservation information is attained also from the location where there is no TV receiver and EPG cannot be seen by delivering program record reservation information to the terminal which the user registered into the information server beforehand.

[0094] Furthermore, as effects of the invention other than the above, when a reservation program, the number of reservation programs, image transcription time amount, playback time amount, custom information, and image transcription / playback program information can manage by the information server, the accounting system according to the amount of the record function used of an accepting station can be built. Moreover, the program information on television is usually classified into some categories, and the accounting system according to the amount of offers of program information or various kinds of related information according to taste and potential viewing-and-listening consciousness of a user can be built by using those information according to the information management of the contents or a performer being possible.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the block diagram of the service system of this invention.

[Drawing 2] It is the internal configuration Fig. of the accepting station of this invention.

[Drawing 3] It is the internal configuration Fig. of the information server of this

invention.

[Drawing 4] It is the example of remote control of this invention.

[Drawing 5] It is an example of a display in the display of the service system of this invention.

[Drawing 6] It is an example of a display in the display of the service system of this invention.

[Drawing 7] It is an example of a display in the display of the service system of this invention.

[Drawing 8] It is the block diagram of the service system of this invention.

[Drawing 9] It is the example of a display of the image transcription reservation confirmed information on the operating station of this invention.

[Drawing 10] It is the example of a display of the image transcription reservation confirmed information on the operating station of this invention.

[Drawing 11] It is a block diagram for building the program information database of this invention.

[Description of Notations]

1 [... Accepting station,] ... A broadcasting station, 2 ... A transmitting antenna, 3 ... A receiving antenna, 4 5 [... Tuner,] ... An indicating equipment, 6 ... A network, 7 ... An information server, 8 9 ... A program information extraction means, 10 ... A program information selection means, 11 ... Program information acquisition means, 12 ... A two-way communication means, 13 ... An output-control means, 14 ... Image transcription / playback means, 15 ... A reservation actuation control means, 16 ... An actuation taking-in means, 17 ... Custom information storage means, 18 ... A terminal condition storage means, 19 ... A program information database, 20 ... Reservation information judging / reservation confirmed information generation means, 21 ... A two-way communication means, 22 ... The execution information generation means of an image transcription reservation program, 23 ... An image transcription reservation program information storage means, 24 ... Custom information storage means, 25 ... A terminal status information storage means, 26 ... Viewing-and-listening

hysteresis information storage means, 27 ... A mail server, 28 ... An operating station, 31 ... Two-way communication means, 32 ... A program information acquisition means, 34 ... A tuner, 35 ... Program information extraction means, 36 [... A decision key, 54 / ... An operating station, 55 / ... A display panel, 56 / ... A cursor key, 57 / ... A decision key, 58 / ... The EPG key, 60 / ... Information management means classified by user] ... A program information database, 51 ... Remote control, 52 ... A cursor key, 53

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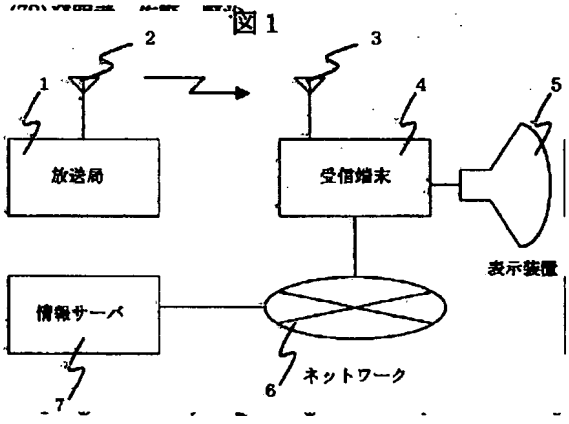
(54)【発明の名称】　放送番組録画予約サービスシステム

(57)【要約】
【課題】デジタル放送受信機で、番組の記録を行う場合、受信端末上にＥＰＧを表示し、これをリモコンで選択、予約設定をする方法、または、番組情報誌のチャンネル・時間情報を基に予約設定を行う方法が一般的であるが、これらの場合、ＥＰＧが見れない場所では予約設定ができない、または、予約情報が判っても、その情報を記録装置に設定する手段が無いといった問題があった。
【解決手段】本発明の放送番組の録画予約サービスシステムでは、番組記録の予約を実行する際、ネットワーク上の情報サーバの番組情報、ユーザ情報を利用することで、明らかな予約操作ミスを無くし、またＥＰＧ等の見れない場所からも携帯電話などの端末を通じて番組記録予約制御を行うことができる。また、本システムを用いることにより、ユーザの視聴履歴を利用した番組情報提供サービス、柔軟な形態の有料サービスを行うことが可能となる。

図1



【特許請求の範囲】

【請求項１】外部ネットワークと双方向通信が可能な、放送番組及び該放送番組の番組情報を受信して該放送番組の予約録画を行うための受信端末であって、
放送番組の番組情報を取得する番組情報取得手段と、
前記番組情報取得手段で取得した番組情報から予約録画すべき番組の選択を行い、双方向通信により、選択の行われた番組の番組情報を送信し、該送信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を受信する際に、該確認情報に基づいて番組選択の確認を行う番組選択手段と、
双方向通信により、前記番組選択手段で番組選択の確認が行われた番組の番組情報を送信し、該送信した番組情報に基づく予約録画すべき番組の録画を実行するための実行情報を受信する際に、該実行情報に基づいて予約録画すべき番組の予約録画、再生を行う録画再生手段を備えたことを特徴とする受信端末。

【請求項２】前記実行情報は、予約録画すべき番組のチャンネル情報、タイマー録画開始信号、タイマー録画終了信号を含み前記録画再生手段は、前記実行情報に基づき、予約録画をタイマーにより制御することを特徴とする請求項１に記載の受信端末。

【請求項３】前記番組情報取得手段は、放送あるいは通信により放送番組の番組情報を取得することを特徴とする請求項１に記載の受信端末。

【請求項４】前記番組選択手段で番組選択あるいは番組選択の確認を行うための画面および再生する番組を表示する表示手段を備えることを特徴とする請求項１に記載の受信端末。

【請求項５】放送番組及び該放送番組の番組情報を受信して該放送番組の予約録画を行うための受信端末と双方向通信が可能なサーバーであって、
予約録画すべき番組の番組情報を受信する際に、該予約録画すべき番組の録画を実行するための実行情報を生成する実行情報生成手段を備えることを特徴とするサーバー。

【請求項６】放送番組及び該放送番組の番組情報を受信して該放送番組の予約録画を行うための受信端末と双方向通信が可能なサーバーであって、
双方向通信により、予約録画すべき番組の番組情報を受信する際に、該受信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を生成する確認情報生成手段と、
双方向通信により、前記確認情報を送信し、該送信した確認情報に基づいて確認された予約録画すべき番組の番組情報を受信する際に、該確認された予約録画すべき番組の録画を実行するための実行情報を生成する実行情報生成手段を備えることを特徴とするサーバー。

【請求項７】双方向通信により取得する放送番組の番組情報、端末状態を示す属性情報、及び、視聴履歴を示す視聴履歴情報を記憶した記憶手段を備え、
前記確認情報生成手段における予約録画すべき番組に間違いがないかどうかの確認は、前記記憶手段の各情報に基づいて判定することを特徴とする請求項６に記載のサーバー。

【請求項８】双方向通信により取得する視聴履歴を示す視聴履歴情報を記憶した記憶手段と、
前記視聴履歴情報を用いて視聴傾向を解析する解析手段を備え、
双方向通信により、前記解析に基づく予約録画すべき番組以外の番組に関する情報を送信することを特徴とする請求項５または６に記載のサーバー

【請求項９】外部ネットワークと双方向通信が可能な、放送番組の番組情報を受信して該放送番組の予約録画を行うための操作端末であって、
放送番組の番組情報を取得する番組情報取得手段と、
前記番組情報取得手段で取得した番組情報から予約録画すべき番組選択を行い、双方向通信により、選択の行われた番組の番組情報を送信し、該送信した番組情報に対応した前記予約録画すべき番組に間違いがないかどうかを確認するための確認情報を受信する際に、該確認情報に基づいて番組選択の確認を行う番組選択手段を備えたことを特徴とする操作端末。

【請求項１０】相互に双方向通信が可能な、放送番組及び該放送番組の番組情報を受信して該放送番組の予約録画を行うための受信端末とサーバーで構成される予約録画システムであって、
放送番組の番組情報を取得する番組情報取得手段と、前記番組情報取得手段で取得した番組情報から予約録画すべき番組選択を行い、双方向通信により、選択の行われた番組の番組情報を送信し、該送信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を受信する際に、該確認情報に基づいて番組選択の確認を行う番組選択手段と、双方向通信により、前記番組選択手段で番組選択の確認が行われた番組の番組情報を送信し、該送信した番組情報に基づく予約録画すべき番組の録画を実行するための実行情報を受信する際に、該実行情報に基づいて予約録画すべき番組の予約録画、再生を行う録画再生手段を備える受信端末と、
双方向通信により、予約録画すべき番組の番組情報を受信する際に、該受信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を生成する確認情報生成手段と、双方向通信により、前記確認情報を送信し、該送信した確認情報に基づいて確認された予約録画すべき番組の番組情報を受信する際に、該確認された予約録画すべき番組の録画を実行するための実行情報を生成する実行情報生成手段を備えるサーバーで構成されることを特徴とする予約録画システム。

【請求項１１】相互に双方向通信が可能な、放送番組の番組情報を受信して該放送番組の予約録画を行うための操作端末と該放送番組を受信して該放送番組の予約録画を行うための受信端末とサーバーで構成される予約録画システムであって、
放送番組の番組情報を取得する番組情報取得手段と、前記番組情報取得手段で取得した番組情報から予約録画すべき番組選択を行い、双方向通信により、選択の行われた番組の番組情報を送信し、該送信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を受信する際に、該確認情報に基づいて番組選択の確認を行う番組選択手段を備える操作端末と、
双方向通信により、前記番組選択手段で番組選択の確認が行われた番組の番組情報に基づく予約録画すべき番組の録画を実行するための実行情報を受信する際に、該実行情報に基づいて予約録画すべき番組の予約録画、再生を行う録画再生手段を備えた受信端末と、
双方向通信により、予約録画すべき番組の番組情報を受信する際に、該受信した番組情報に対応した前記予約録画すべき番組に間違いがないかどうかを確認するための確認情報を生成する確認情報生成手段と、双方向通信により、前記確認情報を送信し、該送信した確認情報に基づいて確認された予約録画すべき番組の番組情報を受信する際に、該確認された予約録画すべき番組の録画を実行するための実行情報を生成する実行情報生成手段を備えるサーバーで構成されることを特徴とする予約録画システム。
【請求項１２】放送番組及び該放送番組の番組情報を受信して該放送番組の予約録画のサービスを行うための予約録画方法であって、
特定のユーザーに関する情報を受け付けることにより、特定のユーザーに対してサービスを開始する受付・開始ステップと、
前記特定のユーザーから予約録画すべき番組の番組情報を受信する第１の受信ステップと、
前記予約録画すべき番組の録画を実行するための実行情報を生成し、前記特定のユーザーに送信する実行情報生成送信ステップを有することを特徴とする予約録画方法。
【請求項１３】前記予約録画すべき番組に間違いがないかどうかを確認するための確認情報を生成し、前記特定のユーザーに送信する確認情報生成送信ステップと、
前記特定のユーザーにより前記確認情報に基づいて確認された予約録画すべき番組の番組情報を受信する第２の受信ステップを有することを特徴とする請求項１２に記載の予約録画方法。
【請求項１４】前記ユーザーに関する情報は、住所、氏名、年齢、職業、電話番号、メールアドレス、カード番号、口座番号、サービス開始の承認の少なくともいずれかを含むことを特徴とする請求項１２に記載の予約録画方法。
【請求項１５】前記予約録画すべき番組の総数、総録画時間あるいは総再生時間に応じて課金処理を行う課金ステップを有することを特徴とする請求項１２に記載の予約録画方法。
【請求項１６】前記予約録画すべき番組が有料である場合、該番組が録画されたことに応じて課金処理を行う課金ステップを有することを特徴とする請求項１２に記載の予約録画方法。
【発明の詳細な説明】
【０００１】
【発明の属する技術分野】本発明は、テレビジョン放送番組の録画・予約ならびに番組情報の提供を行うサービスシステムに関する。
【０００２】
【従来の技術】テレビジョン放送、特にＣＳデジタル放送では、番組情報はＴＶ受信機に番組ガイド（ＥＰＧと記す）として表示される。ユーザは、この表示されたＥＰＧを見て視聴したい番組を選択して視聴、あるいは記録装置に録画予約する。
【０００３】
【発明が解決しようとする課題】上記のように、ＥＰＧを見て録画予約を行う場合、記録媒体の録画可能時間を超過して予約録画を行ったり、ＥＰＧ上の本来録画したい番組の隣接した番組を誤って予約録画を行ったり、ボタン操作を誤って予約するつもりのない番組予約をした時でも、手順に問題が無ければ通常の録画予約とみなされ、録画予約を実行することとなる。
【０００４】また、ＥＰＧはＴＶ受信機でみるようになっており、ＴＶ受信機のない所では録画予約を行うことができない。
【０００５】番組情報を書籍で見る事も可能であるが、ＴＶ受信機のない所では録画予約のために必要な情報をＴＶ受信機または記録装置に入力する方法がない。
【０００６】簡易な録画予約方法として数桁の数字（例えばＧコードと呼ばれるシステム）により番組を録画予約する方法を採用すれば、予約のために必要な情報を数字化して配送する事が可能であるが、この数字の入力の確認の為の表示装置が見難い場合や、この数字を１桁入れ間違えただけで、全く異なった時間、チャンネルの番組の録画予約を実行してしまう場合がある。
【０００７】すなわち、ＴＶ受信機でＥＰＧを表示させて、ＥＰＧを見てから番組の記録を設定する従来の方法においては、以下のような問題がある。
【０００８】１）ユーザが誤って行った予約操作でも、手順に問題が無ければ録画予約を実行してしまう。
【０００９】２）ＴＶ受信機の無いところでは、録画予約ができない。
【００１０】本発明は、上記２つの課題を解消するもの

である。

【００１１】

【課題を解決するための手段】上記のように、ユーザが誤った操作を行った場合には、録画動作を実行させないようにするために、以下のようにする。

【００１２】相互に双方向通信が可能な、放送番組及び該放送番組の番組情報を受信して該放送番組の予約録画を行うための受信端末とサーバーで構成される予約録画システムであって、放送番組の番組情報を取得する番組情報取得手段と、前記番組情報取得手段で取得した番組情報から予約録画すべき番組選択を行い、双方向通信により、選択の行われた番組の番組情報を送信し、該送信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を受信する際に、該確認情報に基づいて番組選択の確認を行う番組選択手段と、双方向通信により、前記番組選択手段で番組選択の確認が行われた番組の番組情報を送信し、該送信した番組情報に基づく予約録画すべき番組の録画を実行するための実行情報を受信する際に、該実行情報に基づいて予約録画すべき番組の予約録画、再生を行う録画再生手段を備える受信端末と、双方向通信により、予約録画すべき番組の番組情報を受信する際に、該受信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を生成する確認情報生成手段と、双方向通信により、前記確認情報を送信し、該送信した確認情報に基づいて確認された予約録画すべき番組の番組情報を受信する際に、該確認された予約録画すべき番組の録画を実行するための実行情報を生成する実行情報生成手段を備えるサーバーで構成される予約録画システムとする。

【００１３】以上のシステム構成における、以下のシステム動作により課題を解決出来る。

【００１４】ユーザが録画予約を行う場合、放送またはネットワーク上の情報サーバからの番組情報に基づきユーザがＥＰＧ上で録画予約を行う。受信端末は、その録画予約番組情報と、属性情報であるユーザ定義情報、端末状態情報（記録媒体の総録画時間情報、記録媒体の録画可能時間情報、受信端末の動作状態情報、ユーザ操作履歴情報など）を情報サーバに送る。情報サーバは、受け取った各情報に加え、情報サーバ上に蓄積されている過去のユーザ視聴履歴情報と照らし合わせる。ユーザ定義情報との判定、過去の視聴履歴、受信端末の録画可能時間との整合に不具合が無ければ受信端末に対して録画予約番組の実行情報を送る。この時、ユーザ定義情報（例えば、パレンタルロック、有料番組の記録禁止設定といった項目）に該当する録画予約が設定されていた場合、過去のユーザ視聴履歴情報とは嗜好の異なる録画予約が設定されていた場合、あるいは、録画時間が録画可能時間を超過する場合などの不具合がある時は、情報サーバから受信端末のユーザに対して、双方向通信機能を利用して不具合を明示した録画予約確認情報を配送し、録画予約確認の通知として受信端末のＥＰＧ画面、または、テレビ画面に不具合の旨を提示する。これに対し、ユーザは録画予約確認を行い、間違いがあれば録画予約の取り消し・修正・追加の情報を情報サーバに通知する。

【００１５】情報サーバは、受信端末から録画予約の取り消し・修正・追加の情報を受け取った場合には、録画予約の該当部分を取り消し・修正・追加し、受信端末に対して不具合のある録画予約の命令を発行しないようにする。

【００１６】このようにして、ユーザが誤った録画予約を行った場合には、録画予約を実行させないようにする。

【００１７】また、上記のように、ＴＶ受信機がない所からでも、録画予約をできるようにするために、以下のようにする。

【００１８】相互に双方向通信が可能な、放送番組の番組情報を受信して該放送番組の予約録画を行うための操作端末と該放送番組を受信して該放送番組の予約録画を行うための受信端末とサーバーで構成される予約録画システムであって、放送番組の番組情報を取得する番組情報取得手段と、前記番組情報取得手段で取得した番組情報から予約録画すべき番組選択を行い、双方向通信により、選択の行われた番組の番組情報を送信し、該送信した番組情報に対応した予約録画すべき番組に間違いがないかどうかを確認するための確認情報を受信する際に、該確認情報に基づいて番組選択の確認を行う番組選択手段を備える操作端末と、双方向通信により、前記番組選択手段で番組選択の確認が行われた番組の番組情報に基づく予約録画すべき番組の録画を実行するための実行情報を受信する際に、該実行情報に基づいて予約録画すべき番組の予約録画、再生を行う録画再生手段を備えた受信端末と、双方向通信により、予約録画すべき番組の番組情報を受信する際に、該受信した番組情報に対応した前記予約録画すべき番組に間違いがないかどうかを確認するための確認情報を生成する確認情報生成手段と、双方向通信により、前記確認情報を送信し、該送信した確認情報に基づいて確認された予約録画すべき番組の番組情報を受信する際に、該確認された予約録画すべき番組の録画を実行するための実行情報を生成する実行情報生成手段を備えるサーバーで構成される予約録画システムとする。

【００１９】以上のシステム構成における、以下のシステム動作により課題を解決出来る。

【００２０】ユーザが予約した録画予約番組情報を情報サーバで不具合がないかどうか判定する。情報サーバは、受け取った各情報により、録画予約番組の時間・チャンネルの確認、ユーザ定義情報、録画可能時間、過去のユーザ情報等と照らし合わせ、その判定結果を示す情

報を付加した録画予約確認情報を予めユーザが情報サーバに登録した情報端末（例えば、電子メール機能内蔵の携帯電話）に送る。ユーザは、送られた録画予約確認情報を情報端末の画面上に表示し、確認する。この時、取り消し・修正・追加があればその情報を情報端末上のキーボード等により入力し、データ（電子メール）を作成する。取り消し・修正・追加された録画予約の情報は、情報端末から情報サーバに返信データとして送る。情報サーバでは、この返信されたデータに基づいて、再度、情報サーバの各種情報と照らし合わせ、新たな録画予約番組の情報に不具合が無ければ、この録画予約の情報を基に受信端末に対して録画予約番組の実行情報を送る。また、仮に録画予約確認情報に対して、一定の時間、または最初の予約時間の一定時間前までに、情報端末からの修正・追加の情報がなければ変更なしと判断し、情報サーバから配送した録画予約確認の番組情報に基づいて、録画予約番組の実行情報を送る。受信端末は、実行情報を受けて、予約動作制御手段により録画再生手段をタイマー録画制御する。

【００２１】

【発明の実施の形態】図１は、本発明のサービスシステムの一実施形態を示す概略構成図である。

【００２２】図１において、１は放送局、２は放送局の送信アンテナ、３は受信端末の受信アンテナ、４は受信端末、５は表示装置、６はインターネットまたは電話回線といったネットワーク網、７は情報サーバである。

【００２３】放送局１では、映像・音声信号に番組情報を付加し、符号化した情報を放送局の送信アンテナ２より送信する。受信端末４では、放送局からの放送波を受信端末の受信アンテナ３で受信するとともにネットワーク網６を介して、情報サーバ７と双方向通信を行う。

【００２４】図２に４の受信端末の内部構成を示す。

【００２５】図２において、８はチューナ、９はチューナ８の受信信号から番組情報（ＥＰＧ）を抜出す番組情報抜出手段、１０は、番組情報抜出手段９からの番組情報か番組情報取得手段１１からの番組情報かまたは両方の番組情報から、出力制御手段１３へ出力した番組情報を表示装置５で視認して、ユーザのリモコン操作により録画予約番組を選択するための番組情報選択手段、１１は双方向通信手段１２により通信回線を介して情報サーバ７から番組情報と録画予約確認情報を取得する番組情報取得手段、１２は通信回線を用いて双方向通信を行う双方向通信手段、１３は出力制御手段、１４は放送番組の録画・再生を行う録画・再生手段、１５は情報サーバ７から録画予約番組の実行情報を受け、この録画予約番組の実行情報により、録画・再生手段１４をタイマー録画制御する予約動作制御手段、１６はリモコンによるユーザ操作情報を取り込む操作取込手段、１７は予めパレンタルロック、有料放送の視聴の可否、録画モード(標準・長時間等)設定、時間延長により予約が重なった場合の録画番組の優先度、おすすめ番組情報提供の要否などのユーザ固有のユーザ定義情報をメモリしておくユーザ定義情報記憶手段、１８は録画・再生手段１４で使用される録画用記録媒体の総録画時間情報、録画可能時間情報、受信端末の動作状態情報およびユーザ操作内容(録画した番組情報、録画した番組の再生情報)等を含む端末状態情報を、操作取込手段１６や録画・再生手段１４から取得して記憶する端末状態記憶手段である。

【００２６】図３に７の情報サーバの内部構成を示す。

【００２７】図３において、１９は番組情報を記憶する番組情報データベース。２０は番組情報データベース１９とユーザ別情報管理手段６０の情報により、受信端末４からの録画予約番組情報の判定と録画予約番組情報に判定結果の情報を付加した録画予約確認情報の作成を行う予約情報判定・予約確認情報生成手段である。２１は受信端末４との双方向通信を行う双方向通信手段、２２は、受信端末４の予約動作制御手段１５が録画・再生手段１４をタイマー録画制御するための録画番組情報となる録画予約番組の実行情報を作成する録画予約番組の実行情報生成手段である。６０は、受信端末４からの録画予約番組情報、ユーザ定義情報、端末状態情報とをそれぞれ記憶する記憶手段２３、２４、２５と視聴履歴情報を記憶する記憶手段２６とからなるユーザ別に記憶管理されたユーザ別情報管理手段で、視聴履歴情報は、ユーザが過去に行った録画予約番組情報(記憶手段２３に過去に記憶された録画予約番組を蓄積した情報)と、ユーザが過去に録画予約を実行した番組情報(端末状態情報から取得)、録画予約を実行した番組のうちの再生された番組情報(端末状態情報から取得)、ユーザが過去に行ったその他の操作内容等を含む過去の端末状態情報からなる。また、ユーザ別情報管理手段６０は、視聴履歴情報記憶手段２６の視聴履歴情報を解析し、ユーザの好みのジャンルを把握する機能を有する。

【００２８】以下、図１、図２、図３を用いて詳細に説明する。

【００２９】図２に示される受信端末では、まず、チューナ８にてテレビジョン放送(テレビジョン放送には地上波ＴＶ放送、ＣＳ放送、ＢＳ放送を含む)の信号を受信する。受信した信号は、出力制御手段１３、録画・再生手段１４、番組情報抜出手段９の各処理ブロックに入力される。ここで、出力制御手段１３の出力は、チューナ８より得られた出力信号、番組情報選択手段１０のＥＰＧ信号、または録画・再生手段１４の出力信号の何れかとなる。番組情報抜出手段９では、番組情報を抜出し、番組情報選択手段１０に番組情報を出力する。番組情報選択手段１０では、番組情報抜出手段９より得られた番組情報を出力制御手段１３に出力すると共に、表示装置５に出力された番組情報に対してユーザの行ったリモコン操作内容（録画予約の内容）を操作取込手段１６を介して取込む。取り込まれた録画予約情報は、双方向

の表示例に対し、ユーザが修正を行い、その修正内容を情報サーバ７に転送した後、再度情報サーバ７から新しい録画予約確認情報を取得し、新しい録画予約確認情報の表示を行うようにしても良い。

【００６１】図７は、図４のリモコン５１でカーソルキー５２、決定キー５３を用いて図６の不具合を修正した場合の新しい録画予約確認情報の表示を示している。表の左端部分の記号が、「○：正常予約の場合」になっている事により録画予約を確認できるようにした例である。

【００６２】表の右下部分の「使用量」は、「67%」となっており、録画可能時間を越えて予約されていない事を示している。

【００６３】図８は、本発明のサービスシステムの第二の実施例を示す概略構成図である。

【００６４】図８において、２８はネットワーク６に接続された操作端末（携帯電話であっても良い）で、この操作端末への接続情報は、情報サーバ７のユーザ別情報管理手段６０の中のユーザ定義情報２４に予め登録されており、情報サーバ７からの録画予約確認は操作端末２８に対してなされる。２７はネットワーク６に接続されたメールサーバである。

【００６５】図８と図１において同じ機能部には同一の番号を付して説明を省略する。

【００６６】また、図８中の４の受信端末、７の情報サーバの内部構成は、前記の図２、図３によりそれぞれ構成されている。

【００６７】また、操作端末は受信端末で説明した双方向通信手段、番組情報取得手段及び番組情報選択手段を備える。

【００６８】以下、図２、図３および図８を用いて詳細に説明する。

【００６９】図８で受信端末４の内部構成は図２の通りであり、動作は第一の実施例と同様であるため説明を省略する。

【００７０】図８で情報サーバ７の内部構成は図３の通りであり、動作は第一の実施例と同様であるため説明を省略する。

【００７１】第二の実施例では、予約情報判定・予約確認情報生成手段２０において、その判定結果に不具合があった場合または必要がある場合、双方向通信手段２１を利用して、ネットワーク６に接続されているメールサーバ２７に録画予約の内容確認を行うための電子メールを配送する。また、判定結果に不具合がない場合でも、録画予約確認情報を上記と同様に電子メールの文字データとして配送するようにしても良い。

【００７２】この時の操作端末２８上での録画予約確認情報の表示例を図９、図１０に示す。

【００７３】図９、図１０において、５４は操作端末、５５は表示パネル、５６はカーソルキー、５７は決定キーを示す。

【００７４】図９の表示パネル５５には、左側から順に、予約番組に不具合があるか否かを示す情報、番組のタイトル、番組の開始時間、番組の終了時間が表示されている例を示しており、「1ch　映画Ａ」「2ch　ドラマ」「1ch　映画Ｂ」何れも正常に番組予約済みである例を示している。

【００７５】図１０の表示パネル５５には、同様に「1ch　映画Ａ」は正常に録画予約済みの場合、「2ch ドラマ」は録画予約情報に不具合があると思われる場合、「1ch映画Ｂ」はユーザにより録画予約は行われていないが過去の視聴履歴より好みと思われる番組情報を提供した場合の例を示している。

【００７６】ユーザは、上記の録画予約確認情報を確認後、取り消し・修正・追加があればその内容を入力し、そのデータを電子メールとして返信する事で、変更した録画予約情報をメールサーバ２７を介して、情報サーバ７に転送する。情報サーバ７は、受け取った電子メールの録画予約情報に基づき、上記同様に番組情報の不具合をチェック、番組内容の判定、ユーザ定義情報との比較等を行った後、録画予約番組の実行情報を作成し、受信端末４はこの情報により録画制御を行う。更に、この転送された情報にさらに不具合があった場合、再度録画予約内容の確認をユーザに行わせるようにしても良いまた上記説明では、録画予約確認情報を操作端末に配送する方法として、メールサーバを用い、電子メールのデータとして取得するシステム構成としたが、メールサーバの代わりにHTTPサーバを設置し、各ユーザ別に特定のURLアドレスを割当て、ブラウザと呼ばれる閲覧ソフトウエアで表示し、サーバに対して取り消し・修正・追加の情報を転送するシステム構成としても良い。また、この場合、ユーザ別にパスワードを設定したり、発信元の電話番号を判別することにより、他のユーザの情報にはアクセスできないよう認証を行う機構を持たせても良い。

【００７７】更に、メールサーバやＨＴＴＰサーバを介さず、操作端末に情報サーバよりデータを直接配送できるようなシステム構成や、情報サーバそのものに上記実施例のメールサーバやＨＴＴＰサーバの機能を取り込む構成としても良い。

【００７８】図１１は、図３の番組情報データベース１９を構築するための概略構成図の一例である。

【００７９】図１１において、３１は双方向通信手段、３２は番組情報取得手段、３４はチューナ、３５は番組情報抜出手段、３６は番組情報管理データベースである。

【００８０】図１１の番組情報データベースの構成実施例では、ネットワークで接続された放送局から双方向通信手段３１を用いて通信し、番組情報取得手段３２を用いて取得した番組情報と、放送波をアンテナで受信し、チューナ３４により復号し、番組情報抜取手段３５を用

いて取得した番組情報を基に番組情報データベースを構築する構成としている。

【００８１】図１１の構成により番組情報データベースを構築した場合、番組情報取得手段３２を用いて取得した番組情報と、番組情報抜取手段３５を用いて取得した番組情報は、互いに独立したデータとして扱う事も可能である。

【００８２】例として、番組情報取得手段３２の番組情報は、２週間以降から１ヶ月先まで（１５から３０日の間）、番組情報抜取手段３５の番組情報は、今日から２週間まで（今日から１４日の間）といった独立した情報を番組情報データベースの情報として扱う事ができる。

【００８３】通常、放送より受け取る情報は、図２中の番組情報抜出手段９と番組情報選択手段１０をテレビ受信機等に付加すれば比較的容易に取得可能である為、一般に放送波より得られる番組情報は、図１１の番組情報抜取手段３５から得られる番組情報と同一である。

【００８４】この場合、一般のユーザ（放送からの情報のみのＥＰＧ）は、今日から２週間までの情報しか入手できないのに対し、本発明の実施例のユーザ（放送からの情報とネットワークからの情報を持つＥＰＧ）は、今日から１ヶ月先までのＥＰＧを見る事ができる。

【００８５】また、更に有料番組等の課金が必要な番組を録画予約する際、本発明のシステムの情報サーバでは、ユーザが録画予約した番組の判定を日付により行うことができるため、ユーザに対しては、放送１５日以前に録画予約を行った場合に、早期の録画予約に対する特別な割引の処理を行うといった事ができる。さらに、放送局に対してはユーザの関心がどの程度あるかを示すサンプルデータを予め提供する事ができる。

【００８６】これにより、番組放送前にユーザの人気度を把握する事が可能となり、実際に番組放送を行った後に人気の有無（通常、有料番組の課金数に比例）で以降の番組編成を考える以前に、事前に人気の度合いを予測するためのサンプルデータを入手できるので、より早い時期から人気の度合いを加味した番組編成が可能となる。

【００８７】また、図３の情報サーバの番組情報データベース１９は、番組情報を図１１のように放送波及び放送局からの通信回線で取得する構成となっているので、前記録画予約番組が確定し、録画予約番組の実行情報が生成された後で、放送番組の変更や時間延長があっても、その変更情報を放送波または放送局から入手出来る。特に、放送局と情報サーバを専用回線で接続すれば、番組情報と番組の変更情報を逐次入手できる。この変更情報により前記録画予約番組の実行情報を変更し、変更された実行情報を受信端末の予約動作制御手段に送り、変更された実行情報により、録画再生手段を録画制御する。このように放送番組の変更や時間延長があっても、追従して録画できる。

【００８８】当然ではあるが、上記により予約番組の時間が重複した場合、先に実行するもしくはされている録画予約を優先するか、後から実行される予約を優先するかの録画番組の優先度は、ユーザ定義情報（先優先・後優先・映画優先・連続ドラマ優先・変更延長無など）に従い録画予約の優先度を判定し予約を行う。

【００８９】もし、変更延長無がユーザにより設定されている場合は、番組変更情報を情報サーバの予約情報判定・予約確認情報生成手段から受信端末または情報端末に送り、ユーザの確認を取るようにしてもよい。

【００９０】更に、上記実施例の説明では、すべてのデータ（録画予約の操作・録画予約の実行制御・ユーザ定義情報など）の取得、双方向通信処理、ユーザ操作をネットワークに常時接続しているものとして記述しているが、特に実時間処理が必要でない情報（ユーザの操作の情報・受信端末の状態情報など）は、受信端末内に一旦記憶しておき、定期的または、一定の操作情報が蓄積された段階、番組録画予約時間になる一定時間前などの録画動作上不具合が生じない時間にまとめて情報サーバに配送するよう構成してもよい。これにより、常時接続でない低速のネットワーク（例えば電話）を使用する事により発生するデータの送受信の為のロス時間を無くし、情報サーバと受信端末間の操作レスポンスの低下および、通信コスト（電話代）を削減できる。更に、上記により、受信端末１台当たりの接続時間が短くなり、情報サーバの負荷を軽くし、操作レスポンスの低下を改善することができる。

【００９１】尚、前記した録画にはビデオ映像信号と音声信号とともにデータ信号も含まれることは明らかである。

【００９２】

【発明の効果】以上述べたように、本発明に係るネットワーク上の情報サーバにより、記録・再生機能を持つ受信端末の記録予約制御を行うため、明らかな誤操作によると思われる記録予約の検出サービス、番組の編成時間の変更、延長に対応したテレビジョン番組の記録・予約サービスならびに番組情報提供サービスを提供することが可能となる。

【００９３】また、ユーザが予め情報サーバに登録した端末に番組記録予約情報を配送することにより、ＴＶ受信機が無くＥＰＧが見れない場所からも、番組記録予約情報の修正が可能となる。

【００９４】さらに、上記以外の発明の効果として、予約番組、予約番組数、録画時間、再生時間、ユーザ定義情報、録画・再生番組情報が情報サーバにより管理できることにより、受信端末の記録機能使用量に応じた課金システムを構築することができる。また、テレビジョンの番組情報は通常、いくつかのカテゴリに分類されており、内容や出演者の情報管理が可能であることにより、それらの情報を用いることで、ユーザの嗜好や潜在的な

視聴意識に応じた番組情報や関連する各種の情報の提供量に応じた課金システムを構築することができる。

【図面の簡単な説明】

【図１】本発明のサービスシステムの構成図である。

【図２】本発明の受信端末の内部構成図である。

【図３】本発明の情報サーバの内部構成図である。

【図４】本発明のリモコンの例である。

【図５】本発明のサービスシステムの表示装置での表示例である。

【図６】本発明のサービスシステムの表示装置での表示例である。

【図７】本発明のサービスシステムの表示装置での表示例である。

【図８】本発明のサービスシステムの構成図である。

【図９】本発明の操作端末上での録画予約確認情報の表示例である。

【図１０】本発明の操作端末上での録画予約確認情報の表示例である。

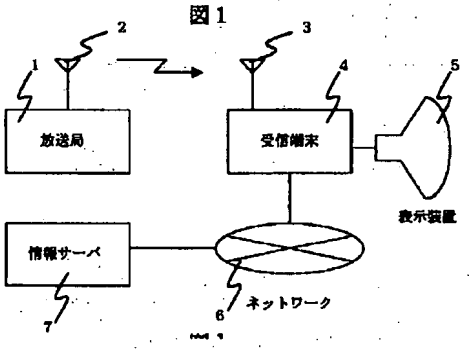
【図１１】本発明の番組情報データベースを構築するための構成図である。

【符号の説明】

１･･･放送局、２･･･送信アンテナ、３･･･受信アンテナ、４･･･受信端末、５･･･表示装置、６･･･ネットワーク、７･･･情報サーバ、８･･･チューナ、９･･･番組情報抜出手段、１０･･･番組情報選択手段、１１･･･番組情報取得手段、１２･･･双方向通信手段、１３･･･出力制御手段、１４･･･録画・再生手段、１５･･･予約動作制御手段、１６･･･操作取込手段、１７･･･ユーザ定義情報記憶手段、１８･･･端末状態記憶手段、１９･･･番組情報データベース、２０･･･予約情報判定・予約確認情報生成手段、２１･･･双方向通信手段、２２･･･録画予約番組の実行情報生成手段、２３･･･録画予約番組情報記憶手段、２４･･･ユーザ定義情報記憶手段、２５･･･端末状態情報記憶手段、２６･･･視聴履歴情報記憶手段、２７･･･メールサーバ、２８･･･操作端末、３１･･･双方向通信手段、３２･･･番組情報取得手段、３４･･･チューナ、３５･･･番組情報抜出手段、３６･･･番組情報データベース、５１･･･リモコン、５２･･･カーソルキー、５３･･･決定キー、５４･･･操作端末、５５･･･表示パネル、５６･･･カーソルキー、５７･･･決定キー、５８･･･ＥＰＧキー、６０･･･ユーザ別情報管理手段

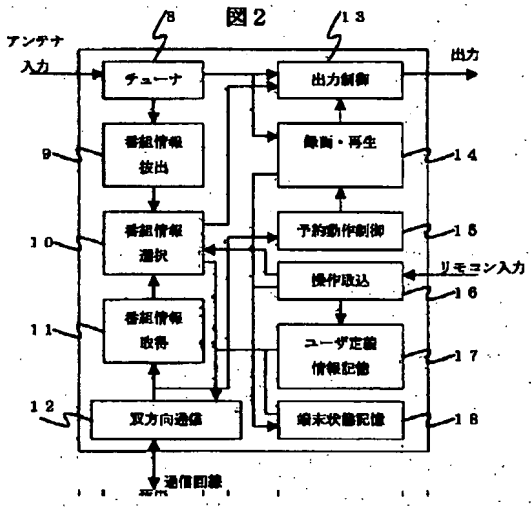
【図１】

図１



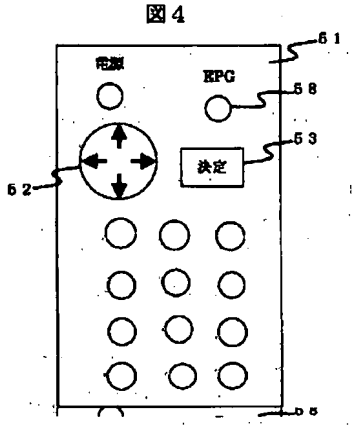
【図２】

図２



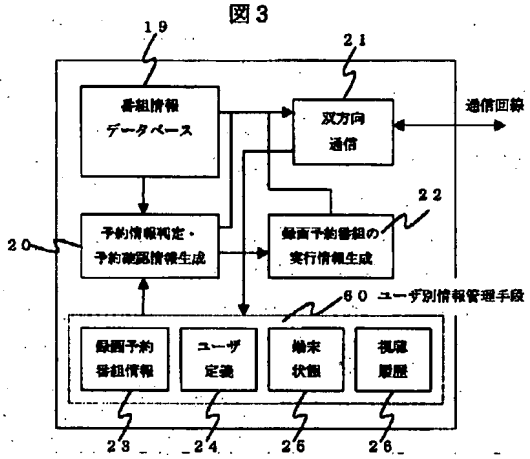
【図４】

図４



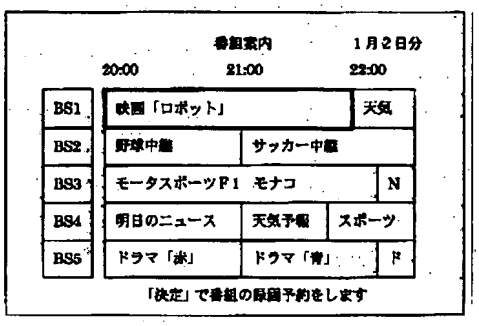
【図３】

図３



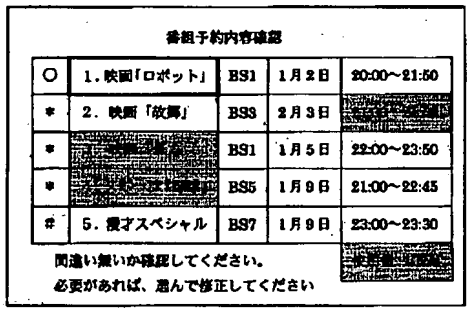
【図５】

図５



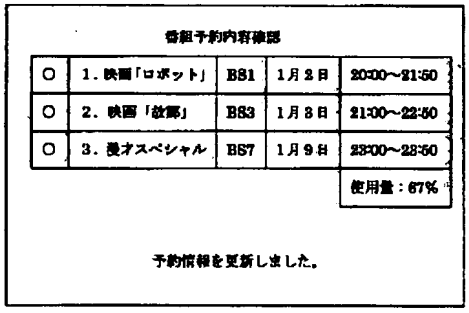
【図６】

図６



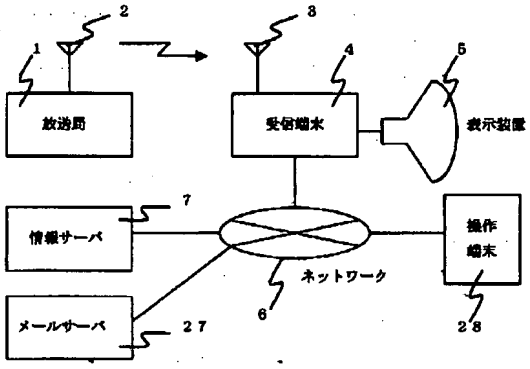
【図７】

図７



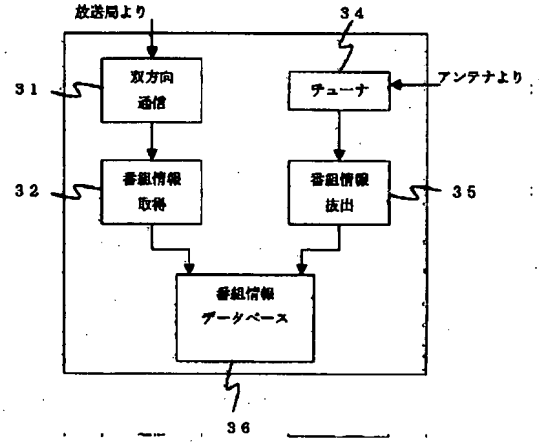
【図８】

図８



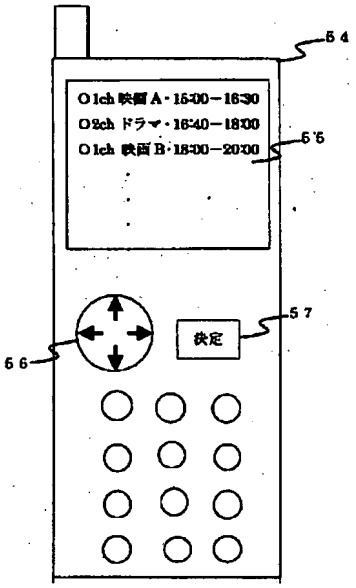
【図１１】

図１１



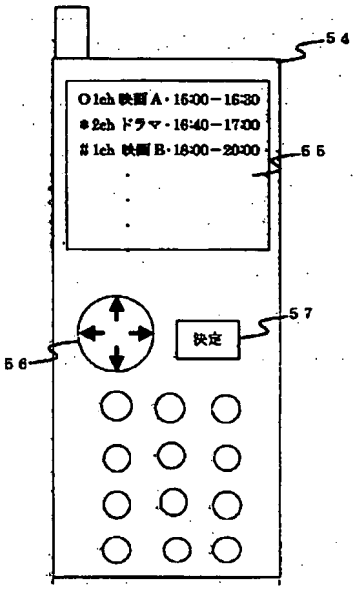
【図９】

図９



【図１０】

図１０



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DA13
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BD02 BD04 BD08 BD14